COLTON
Public Utilities

February 19, 2002

Ms. Lauren Foundahl
U.S. EPA Region 9
ATTN: W-5-3, NPDES/DMR
75 Hawthorne Street
San Francisco, CA 94105

RE: BIO-SOLIDS ANNUAL REPORT (40 CFR PART 503)
JANUARY - DECEMBER 2001

Dear Ms. Foundahl:

Enclosed is the City of Colton's Water Reclamation Facility 2001 Annual Bio-Solids Disposal Report.

The contents of the report include: The total wet tonnage of bio-solids hauled from the facility, the lab results, the pollutant analysis, the Class "B" pathogen certification, and the hauler's name and address.

All constituents are below pollutant limits.

Sincerely,

William F. Roth
Wastewater Utility Manager

WFR/dew

160 South 10th Street
Colton, California 92324
(909) 370-5099

Committed to Our Community

BIO-SOLIDS CERTIFICATION

"I certify under penalty of law, that the Class B pathogen requirements in 503.32(b) and the vector attraction reduction requirements in 503.33(b)(1) have been met. The determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the pathogen requirements [and the vector attraction requirements if applicable] have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment.

William F Roth 2/14/02

- **Describe how the Class B pathogen requirements are met.**

The pathogen requirements were met by air drying the bio-solids for a period of over three months with the ambient temperature over 0 degree's Celsius at least two months of the three-month period.

- **If applicable, describe how the vector attraction reduction requirements 1 to 8 are met.**

The vector attraction reduction requirements were met by anaerobic digestion with a volatile reduction of 38% or more.

COLTON SOLIDS DISPOSAL REPORT

JANUARY - DECEMBER 2001

MONTH	BIOSOLIDS WET TONS	GRIT CU/YDS	SCREENINGS CU/YDS
JAN.	0	0	23.25
FEB.	0	0	23.25
MAR.	0	*0	23.25
APR.	0	0	23.25
MAY	0	0	23.25
JUN.	212.33	0	23.25
JUL.	573.58	0	23.25
AUG.	3712.92	0	23.25
SEP.	0	0	23.25
OCT.	839.47	0	23.25
NOV.	165.29	0	23.25
DEC.	0	0	23.25
TOTAL	5503.59	0	279.00

*Cleaned our east grit chamber but have not hauled it off site yet. It will be reported on this solids disposal report when we haul it to the land fill.

DESTINATION OF SOLIDS

HAULER	TYPE	USE	DESTINATION
SYNAGRO	BIOSOLIDS	LAND APPLICATION	SYNAGRO P.O. BOX 7027 CORONA, CA. 92878-7027
COLTON DISPOSAL	SCREENINGS & GRIT	LAND FILL	COUNTY LAND FILL 850 TROPICA RANCHO RD. COLTON, CA. 92324

SYNAGRO

A Residuals Management Company

February 11, 2002

Mr. William F. Roth
City of Colton
1270 So. Rancho Avenue
Colton, CA 92324

Subject: 2001 Biosolids Land Application Data Summary

Dear Mr. Roth:

Enclosed is a summary of biosolids land application information for 2001 as compiled by Synagro.

Synagro appreciates your business and we look forward to serving your technical needs in the coming year. If you have any questions, please call me at (909) 277–2662 extension 23.

Sincerely,

Mark Grey/DBF

Mark Grey, Ph. D.
Regional Technical Services Director

Enclosures

Synagro West, Inc.
P.O. Box 7027, Corona, CA 92878-7027 • Ph: (909) 277-2662 • Fax: (909) 277-2960 • Toll Free (800) 242-2222

SYNAGRO

A Residuals Management Company

Biosolids Land Application Annual Report

for

Colton

2001

California Land Application

COLTON, CA ANAEROBICALLY DIGESTED/AIR DRIED

MONTH/YEAR	AMOUNT	UNIT	DRY TONS	UNIT	DRY METRIC TONS
June 2001	212.32	W	120.39	D	109.19
July 2001	573.58	W	325.22	D	294.98
August 2001	3,712.92	W	1,615.49	D	1,465.25
YEARLY TOTAL:	4,498.82	W	2,061.10	D	1,869.42

COLTON, CA CAKE

MONTH/YEAR	AMOUNT	UNIT	DRY TONS	UNIT	DRY METRIC TONS
October 2001	839.46	W	365.25	D	331.28
November 2001	165.29	W	71.92	D	65.23
YEARLY TOTAL:	1,004.75	W	437.17	D	396.51

ANNUAL RESIDUAL SAMPLING SUMMARY FORM

Facility Name: COLTON, CA
NPDES#:
WWTP Name: COLTON

Residual Analysis Data

Product Type	ANDAD	ANDAD	ANDAD	CAK
Lab Usage From	06/01/01	08/01/01	09/01/01	10/01/01
Through	07/31/01	08/31/01	09/30/01	11/30/01
Percent Solids	56.7	43.51	51.97	43.51
PARAMETERS (mg/kg dry weight)				
Arsenic	5	6.01	3.72	6.01
Cadmium	1	3.5	1.8	3.5
Chromium	29.5	68	64	68
Copper	237.5	372	358	372
Lead	97.75	123	135	123
Mercury	2.175	1.94	1.69	1.94
Molybdenum	7	13	<5	13
Nickel	21.5	50	39	50
Selenium	5	3.86	3.37	3.86
Zinc	492.5	832	824	832
TKN	21,825	17,700	15,200	17,700
Ammonia-Nitrogen	0	2,600	2,100	2,600
Nitrate-Nitrogen	71	814	662	814
Total Phosphorus	0	18,400	0	18,400

Printed: Wednesday - February 13, 2002 at 08:44:04

COLTON, CA - Fields Applied in 2001 by Synagro

State: California

Field	Latitude/Longitude	Landowner	Acres	Hectares	Dry Tons	DMT Applied	DT/AC Applied	DMT/HA Applied	Plant Available Nitrogen Applied (lbs/ac)	Plant Available Nitrogen Applied (kg/ha)	Crop	Planting Date	Harvest Date
County: RIVERSIDE													
CA-RI-00005-0-0011A	33.51' " /117.05'50"	JOHN V. MOTTE	30.3	12.3	691.51	627.20	22.82	51.12	219.35	245.68	ALFALFA	10/15/01	10/15/02
CA-RI-00005-0-0011B	33.51' " /117.05'50"	JOHN V. MOTTE	19.3	7.8	526.11	477.19	27.26	61.06	279.90	313.49	ALFALFA	10/15/01	10/15/02
CA-RI-00040-0-0001	33.38'05" /117.04'48"	DOMENIGONI BROS.	110.0	44.6	437.17	396.51	3.97	8.90	40.81	45.70	WHEAT	12/01/01	06/30/02
CA-RI-00043-0-0003	33.47'13" /117.10'35"	A&G, INC.	70.0	28.4	120.39	109.19	1.72	3.85	15.26	17.09	WHEAT	12/15/01	06/15/02
CA-RI-00056-0-0001	33.52'15" /117.06'24"	MYSTIC LAKE DUCK	80.0	32.4	723.08	655.84	9.04	20.25	92.81	103.94	WHEAT	11/15/01	07/15/03

Pollutants

The concentration of all the pollutants in your sludge must be below the limit concentration listed in Table 3 [reference 503.13 (b)(3)].

Table 3 Pollutant Limits for No Loading Rates Restrictions		
Pollutant	Limits (mg/kg)	NSSS Mean (mg/kg)
Arsenic	41	ND
Cadmium	39	1
Chromium	1200	29
Copper	1500	310
Lead	300	110
Mercury	17	3.0
Molybdnum	18	8
Nickel	420	18
Selenium	36	ND
Zicn	2800	650
Dry Weight Basis		

Stock pile #6, Dry sludge to be hauled in July/August 2001

Sampled: (1/23/01)

ND- None detected at Reporting Limit

Nitrogen & Phosphorus:

Nitrate	230	mg/kg
Nitrite	53	mg/kg
Kjeldahl Nitrogen	21000	mg/kg
Total Phosphorus	26000	mg/kg
Total Solids	35.8	%

Pollutants

The concentration of all the pollutants in your sludge must be below the limit concentration listed in Table 3 [reference 503.13 (b)(3)].

Table 3 Pollutant Limits for No Loading Rates Restrictions		
Pollutant	Limits (mg/kg)	NSSS Mean (mg/kg)
Arsenic	41	ND
Cadmium	39	1
Chromium	1200	38
Copper	1500	190
Lead	300	130
Mercury	17	1.0
Molybdnum	18	7
Nickel	420	34
Selenium	36	ND
Zicn	2800	390
Dry Weight Basis		

Stock pile #3, Dry sludge to be hauled in July/August 2001

Sampled: (1/23/01)

ND- None detected at Reporting Limit

Nitrogen & Phosphorus:

Nitrate	41	mg/kg
Nitrite	19	mg/kg
Kjeldahl Nitrogen	9300	mg/kg
Total Phosphorus	11000	mg/kg

Total Solids	87.6	%

Pollutants

The concentration of all the pollutants in your sludge must be below the limit concentration listed in Table 3 [reference 503.13 (b)(3)].

Table 3 Pollutant Limits for No Loading Rates Restrictions		
Pollutant	Limits (mg/kg)	NSSS Mean (mg/kg)
Arsenic	41	ND
Cadmium	39	1
Chromium	1200	25
Copper	1500	240
Lead	300	71
Mercury	17	ND
Molybdnum	18	8
Nickel	420	15
Selenium	36	ND
Zicn	2800	460
Dry Weight Basis		

Stock pile #11, Dry sludge to be hauled in July/August 2001

Sampled: (1/23/01)

ND- None detected at Reporting Limit

Nitrogen & Phosphorus:

Nitrate	ND	mg/kg
Nitrite	ND	mg/kg
Kjeldahl Nitrogen	18000	mg/kg
Total Phosphorus	6500	mg/kg
Total Solids	72.4	%

Pollutants

The concentration of all the pollutants in your sludge must be below the limit concentration listed in Table 3 [reference 503.13 (b)(3)].

Table 3 Pollutant Limits for No Loading Rates Restrictions		
Pollutant	Limits (mg/kg)	NSSS Mean (mg/kg)
Arsenic	41	ND
Cadmium	39	1
Chromium	1200	25
Copper	1500	240
Lead	300	71
Mercury	17	ND
Molybdnum	18	8
Nickel	420	15
Selenium	36	ND
Zicn	2800	460
Dry Weight Basis		

Stock pile #12, Dry sludge to be hauled in July/August 2001

Sampled: (1/23/01)

ND- None detected at Reporting Limit

Nitrogen & Phosphorus:

Nitrate	ND	mg/kg
Nitrite	ND	mg/kg
Kjeldahl Nitrogen	18000	mg/kg
Total Phosphorus	6500	mg/kg
Total Solids	72.4	%

DIGESTED SLUDGE AT COLTON WATER RECLAMATION FACILITY
VOLITLE REDUCTION

DATE	PLANT 1 PRI. SLUDGE % VOLITLE	PLANT 2 PRI. SLUDGE % VOLITLE	DAF SLUDGE % VOLITLE	DIGESTER % VOLITLE IN	PRI. DIG. % VOLITLE OUT	SEC. DIG. % VOLITLE OUT	PRIMARY DIGESTER REDUCTION	SECONDARY DIGESTER REDUCTION
Jan. 3, 2001	85.9%	86.2%	78.1%	83.4%	63.9%	67.6%	64.8%	58.5%
Jan. 10, 2001	85.9%	86.5%	76.3%	82.9%	69.1%	67.7%	53.9%	56.7%
Jan. 17, 2001	86.5%	87.0%	78.9%	84.1%	69.1%	68.1%	57.7%	59.7%
Jan. 24, 2001	81.2%	83.1%	*	82.2%	69.2%	67.7%	51.4%	55.1%
Feb. 7, 2001	86.1%	86.6%	78.6%	83.8%	69.8%	68.1%	55.3%	58.8%
Feb. 14, 2001	86.1%	85.2%	78.7%	83.3%	68.6%	67.1%	56.1%	59.1%
Feb. 21, 2001	85.6%	85.7%	74.9%	82.1%	70.0%	67.8%	49.2%	54.2%
Feb. 28, 2001	85.7%	85.0%	78.3%	83.0%	70.2%	68.0%	51.8%	56.4%
Mar. 8, 2001	84.1%	87.2%	79.5%	83.6%	69.8%	68.1%	54.8%	58.1%
Mar. 14, 2001	84.9%	85.9%	74.7%	81.8%	70.1%	67.3%	47.8%	54.3%
Mar. 21, 2001	80.2%	79.4%	75.6%	78.4%	71.4%	69.1%	31.3%	38.4%
Mar. 28, 2001	85.6%	84.3%	78.9%	82.9%	69.9%	67.3%	52.2%	57.6%
Apr. 4, 2001	83.8%	85.2%	79.1%	82.7%	69.0%	65.9%	53.5%	59.6%
Apr. 11, 2001	86.2%	85.7%	78.5%	83.5%	68.7%	66.9%	56.7%	60.1%
Apr. 19, 2001	85.9%	85.6%	78.9%	83.5%	68.5%	67.3%	57.0%	59.3%
Apr. 25, 2001	86.3%	85.2%	76.3%	82.6%	68.6%	66.5%	54.1%	58.1%
May 2, 2001	80.4%	0.824	*	81.4%	68.3%	66.8%	50.8%	54.1%
May 9, 2001	80.1%	79.8%	78.3%	79.4%	69.9%	68.2%	39.8%	44.5%
May 16, 2001	78.5%	79.0%	77.3%	78.3%	69.9%	68.5%	35.6%	39.7%
May 23, 2001	79.4%	80.2%	78.2%	79.3%	70.6%	68.7%	32.5%	42.7%
May 30, 2001	79.4%	81.1%	77.5%	79.3%	70.2%	68.0%	38.6%	44.5%
Jun. 6, 2001	78.8%	80.7%	78.2%	79.2%	69.6%	67.8%	39.8%	44.7%
Jun. 13, 2001	80.9%	81.5%	79.1%	80.5%	69.4%	*	45.1%	*
Average	83.4%	83.8%	77.8%	81.8%	69.3%	67.7%	49.1%	53.4%

DIGESTED SLUDGE AT COLTON WATER RECLAMATION FACILITY
VOLITLE REDUCTION

DATE	PLANT 1 PRI. SLUDGE % VOLITLE	PLANT 2 PRI. SLUDGE % VOLITLE	DAF SLUDGE % VOLITLE	DIGESTER % VOLITLE IN	PRI. DIG. % VOLITLE OUT	SEC. DIG. % VOLITLE OUT	PRIMARY DIGESTER REDUCTION	SECONDARY DIGESTER REDUCTION
Jun. 27, 2001	84.0%	84.0%	75.9%	81.3%	68.6%	68.1%	49.8%	51.0%
Jul. 4, 2001	83.7%	82.6%	77.4%	81.2%	68.2%	67.2%	50.4%	52.6%
Jul. 11, 2001	84.5%	83.8%	*	84.2%	69.1%	67.5%	58.1%	60.9%
Jul. 18, 2001	84.8%	84.1%	74.7%	81.2%	67.7%	66.5%	51.5%	54.0%
Aug. 1, 2001	85.0%	85.4%	71.6%	80.7%	68.8%	67.3%	47.2%	50.8%
Aug. 8, 2001	85.0%	82.7%	77.1%	81.6%	67.7%	66.9%	52.7%	54.5%
Aug. 15, 2001	84.9%	85.0%	74.6%	81.5%	68.8%	67.0%	50.0%	53.9%
Aug. 22, 2001	84.8%	85.1%	76.1%	82.0%	68.9%	67.1%	51.4%	55.2%
Aug. 29, 2001	83.8%	82.7%	75.1%	80.5%	68.5%	66.5%	47.2%	51.9%
Sep. 5, 2001	85.0%	84.2%	71.5%	80.2%	68.8%	65.1%	45.6%	53.9%
Sep. 12, 2001	85.7%	85.7%	72.3%	81.2%	68.3%	66.6%	50.2%	53.9%
Sep. 19, 2001	84.3%	84.5%	72.4%	80.4%	68.8%	66.8%	46.2%	50.9%
Sep. 26, 2001	85.3%	80.3%	75.3%	80.3%	68.6%	74.2%	46.4%	29.5%
Oct. 3, 2001	84.4%	85.1%	72.6%	80.7%	69.3%	62.1%	46.0%	60.8%
Oct. 17, 2001	85.4%	84.4%	77.9%	82.6%	69.3%	67.2%	52.4%	56.8%
Oct. 24, 2001	84.9%	84.5%	71.1%	80.2%	63.0%	66.6%	57.9%	50.7%
Oct. 31, 2001	86.1%	85.3%	80.1%	83.8%	69.8%	69.4%	55.3%	56.3%
Nov. 7, 2001	86.8%	85.40%	77.6%	83.3%	70.5%	69.0%	52.0%	55.4%
Nov. 14, 2001	82.5%	83.4%	77.8%	81.2%	68.9%	67.6%	48.6%	51.7%
Nov. 21, 2001	84.5%	81.8%	73.2%	79.8%	68.4%	67.4%	45.2%	47.7%
Nov. 28, 2001	84.7%	84.4%	74.6%	81.2%	68.8%	67.4%	49.0%	52.1%
Dec. 5, 2001	82.6%	82.8%	75.0%	80.1%	69.3%	67.6%	43.9%	48.1%
Dec. 19, 2001	84.1%	83.6%	74.4%	80.7%	68.2%	67.7%	48.6%	49.8%
Dec. 26, 2001	86.3%	85.5%	78.3%	83.4%	75.4%	67.7%	39.0%	58.4%
Average	84.7%	84.0%	71.9%	81.4%	68.8%	67.4%	49.4%	52.5%